NCHRP 15-33 FY 2006 AASHTO Guide for Transportation Landscape and Environmental Design CREATING COMPLETE CORRIDORS

Landscape Sensibilities in Transportation Projects

Second Draft Review
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Due to the massive size of the document and the limited amount of time for adequate review, a conceptual approach was implemented by WYDOT for the review of this document. Overall, WYDOT believes that this was an excellent product as compared to the initial review. WYDOT can easily identify with the range of the contexts discussed in the document due to the rural context of Wyoming. However, it provides great insight to the urban contexts in the metropolitan cities of the United States. WYDOT believes this to be a complete approach to address Landscape and environmental Design for the 21st century.

The "Creating Complete Corridors" concept is introduced in this guide and in fact the whole guide is structured around the concept. The guide is heavily infused and influenced by Context Sensitive Solutions, but still the guide stays true to being a Landscape and Environmental Design guide and not a CSS manual. The structure of the guide is good, although the design guide is rather thick. Transportation designers should be able to easily reference and gain benefit from the guide, by just going to the sections pertaining to the particular type of corridor they may be working on, without having to digest the whole manual. The guide addresses corridor types and examples that are applicable to Wyoming.

Pg iii & iv: The guide has credible authors and contributors who are well respected in the field of Transportation Landscape Architecture. In addition the NCHRP review panel for the document is composed of noted professionals in the field. WYDOT staff has had the opportunity to meet and interact with the authors, contributors and reviewers. The quality from this staff was revealed during the review.

Pg vii-viii: Please add the page number to the table of contents.

Pg 2: Not all of the transportation history is provided here that illustrates the complete picture. After World War II, the U.S. entered into the cold war, which was spurned by the development of nuclear weapons. World War II was ended by the use of nuclear weapons and their power was superior. The 1956 Interstate Act was passed in the spirit of responding to a nuclear attack on U.S. soil. The law was for national defense purposes. In order to respond quickly to a possible nuclear attack, the interstate was designed and constructed in remarkable time. However, many impacts were created during this period of time, which future environmental

legislation corrected for future generations.

- **Pg 7-8:** Please **bold** the examples of each road class example provided in the text. Please bold words like interstate in the Freeway section. Bold four lane divided rural arterial in the Expressway section. Please follow the same path of thinking for the sections of Arterial and Collector. This will help convey the principles to the transportation engineer in a more efficient fashion. However, the examples provided in the Setting Section are excellent.
- **Pg 14:** this is only a suggestion. Is it possible to create a pictorial matrix for examples of all 24 possibilities of corridors? The Road Class could be on the horizontal axis and the Setting Types on the vertical axis. The pictures would quickly illustrate the different relationships.
- **Pg 18:** Please provide the reference for the "human factors" for those who are not familiar with this concept and might question it's validity.
- **Pg 18:** The last bullet does not mention the factor of "driver expectancy." Some engineers will see this as an incomplete assessment for safety, therefore rejecting the idea of CSS.
- **Pg 20:** It must also be realized that access opportunities are at their greatest in the lowest class of roads. And when mobility is at it's greatest, then access is proportionately diminished. This is illustrated in the Green Book in the it's first chapter.
- **Pg 21:** Scenic byway models have their own problems due to constituent support. Some less scenic areas have great and extensive plans than those who are sometimes more spectacular. This is due to a provincial approach. Wyoming has also found that perpetual advisory committees may seem very effective in theory, but they have a tendency of high "burn out" and member quit attending meetings. It seems that they can only ignore their core responsibilities up while making time to attend advisory committees. Advisory committees have been very effective on a shorter length of time. Generally through the planning, design and construction of a facility. The attention level seems to diminish when a corridor enters it's maintenance phase.
- **Pg 22:** An incorrect assumption was made in the second paragraph of Section 3.3. Actually environmental regulators have more pressing issues on their agenda and are reluctant to respond to requests of this nature. They will normally request additional funding to guarantee a timely response. Therefore, it is very important to recognize that resources are limited. An environmental regulator is not normally evaluated on the real product that is produced in the corridor. Many times they are measured on their ability to process permits.
- **Pg 22:** In reference to the last bullet on the page, is more analysis really at the heart of the problem?
- **Pg 28:** The second paragraph in the Horizontal Alignment section could be developed a bit further to complete the idea. Many corridors were constructed in areas where right-of-way acquisition was possible. Also, in the northern regions of the country, it is wise to reduce the

amount of curved roadways. Snow plows have known to slide off on the inside of a curve while plowing snow covered roadways. This is due to the fact of low velocity due to the inclement weather and the heavy nature of the snow plow. Terrible accidents have resulted from situations like this.

- **Pg 30:** In areas of difficult and extreme terrain, it is advised to approach highway design from a cross sectional approach initially. This is how the Glenwood Canyon section of I-70 in Colorado was designed. The template of the highway is first situated on the cross section of the terrain to achieve the lightest foot print. Then the center point on each cross section is then connected by the best possible horizontal alignment. This same procedure is then used to determine the profile too. WYDOT has adopted this method of design on many of it's mountain projects.
- **Pg 44.** Many places in the country have adopted mid block crossings for pedestrian traffic. This reduces the chance of conflict because there is only one movement where the pedestrian must yield.
- **Pg. 47.** There should be some mention of Wyoming's box beam guardrail. Wyoming uses this type of guardrail for snow control, but other states like to use it to open up scenic vistas for the traveling public. Also, the rusty corrugated beam guard rail is great to use on western mountain projects for it's ability to blend into the surrounding geology of the area. See pictures.
- **Pg. 74.** There should be some mention of a solid land use plan is the best way to mitigate noise. Development through the west was uncontrolled in many areas during the 90's and into the 21st century. People built along freeways where the right-of-way was cheap. They built large elaborate homes in these areas and then complained of the traffic noise. Noise walls were then erected to resolve the problem.
- **Pg 75.** In mountainous resort areas of Wyoming, natural earthen berms were used as noise barriers. They naturally blend into the surrounding environment easier. And they are more conducive for wildlife movement. If possible, an attempt will be made to provide photos.
- **Pg 126.** Was it intedned in this section to omit the subsections of Roadway, Roadway Structures, Roadside, and Roadside Structures?
- **Pg 133.** Place the page numbers on this page for each one of the examples given. Are the italicized examples still being developed? Are their examples provided from the Center of Environmental Excellence that could be readily available for inclusion into this document? The Elliott Avenue and Mandela Parkway examples are out of order on the listing.
- **Pg.134.** Exurban Freeway on page 182 is in the wrong color.











